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# Notice of Allowability

Application No.

09/774,450

Examiner

Vivek D Koppikar

Applicant(s)

RUTH ET AL.

Art Unit

1775

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/27/02.
2. ☒ The allowed claim(s) is/are 16, 18, 19, 44 and 46.
3. ☒ The drawings filed on 10/24/02 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**


7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |  |  |
|--|--|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3 <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>11</u> |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>4-5</u> | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                     |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material   | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance    |
|  | 9 <input type="checkbox"/> Other   |

  
DEBORAH JONES  
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Elizabeth Bush on February 6, 2003.

3. The application has been amended as follows:

In the Claims:

✓  
Cancel Claims 20-43

✓  
Amend Claim 16 to read as follows:

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1 / 16. A brazed ceramic ring comprising:

a first ring comprising ceramic material selected from the group consisting of aluminum oxide, zirconium oxide, and zirconium oxide with 3% yttrium;

a second ring comprising titanium attached to said first ring with a gold alloy braze; and

a third ring comprising titanium attached to said first ring with said gold alloy braze;

wherein said gold alloy braze has a gold content of more than 50% wt.

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✓  
Cancel Claim 17.

Amend Claim 44 to read as follows:

44. A brazed ceramic ring sandwich for a lithium ion battery comprising a first ring of ceramic material selected from the group consisting of aluminum oxide, zirconium oxide and zirconium oxide with 3% yttrium; a second ring of titanium; a third ring of titanium alloy of aluminum and vanadium, Ti-6Al-4V; a gold alloy braze with a gold content by weight of more than 50%; wherein said gold alloy braze attached said second ring of titanium to said first ceramic ring; wherein said gold alloy attached said third ring of titanium alloy to the other edge of the ceramic ring.

Cancel Claim 45.

*Reasons for Allowance*

4. Claims 16 and 18-19; and Claims 44 and 46 are allowable over the prior art of record.
5. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach a ceramic ring sandwich structure with the structure and the limitation as the applicants have claimed.

JP 59-012557 (JP'557) teaches a battery package which prevents leakage from the battery. The battery package consists of a ceramic ring (12) on which a metallic ring (13) is welded to its upper surface by brazing. A metallic plate (11) is also brazed to the ceramic ring on its lower surface (Translated Abstract and Figure 2).

JP'557 does not teach that another metallic ring is attached to the ceramic ring (12) on the opposite side that the metallic ring (13) is attached.

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JP 05-60241 (JP '241) teaches making a metallic ring out of the alloy Ti-6Al-4V because of the abrasion and scuffing resistance of the alloy (Translated Abstract).

Reissue Patent Number 34,819 teaches a gold-nickel titanium brazing alloy of a similar composition as claimed by the applicants. This alloy displays a high ductility (Col. 1, Ln. 56-62 and Claim 2).

JP 10-0122270 (JP'270) teaches an alumina ceramic ring placed around a battery to increase the insulation properties of the battery (Translated Abstract).

The prior art of record does not teach a ceramic ring structure in which the ceramic ring comprises a material selected from the group consisting of aluminum oxide, zirconium oxide and zirconium oxide with 3% yttrium. Therefore, Claims 16 and 44 are allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Vivek Koppikar** whose telephone number is **(703) 305-6618**. The examiner can normally be reached on Monday-Friday from 8 AM to 5 PM, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached at (703) 308-3822. The fax phone numbers for the organization where this application or proceeding are assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Vivek Koppikar

2/10/03

  
DEBORAH JONES  
SUPERVISORY PATENT EXAMINER

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